"Eggless" dyed Easter eggs

Great for Preschool through elementary!

OVERVIEW

Dye beautiful Easter "eggs" (or make any drawing you'd like!) using just coffee filters, markers, crayons, water, and science!

WHAT ARE WE LEARNING?

The dyes used in markers mix easily with water, while other kinds of colors do not. We're using the science behind the properties of markers and crayons to make beautiful Easter "eggs"--minus the egg!

Materials

- white coffee filters
- markers
- crayons
- small cup of water
- pipet or straw (optional)
- plastic tray, cookie sheet, or plate (optional)

Alternate Materials

INSTEAD OF "coffee filters" USE "paper towels"

Materials used for dying Easter "eggs"

INSTRUCTIONS

1. Using a crayon or pencil, draw the shape of an egg on coffee filter. Make as many as you like. If you don't have white coffee filters, paper towels will also work.
2. Color the eggs! Use markers AND crayons to decorate the eggs however you like. We recommend using multiple marker colors and leaving some white spaces on your eggs. Keep in mind that any designs drawn using marker will spread out, swirl, blend, etc when you add water. Designs drawn with crayon will not change.
3. Place eggs onto a cookie sheet or tray. Use a pipet to drip water onto the egg. If you don't have a pipet or dropper, see note below for how to drip water using a straw. Alternatively, dip a paintbrush or finger into water and "paint" water onto the egg.
4. Wait for paper to dry, then cut out your eggs. They look great taped in a window!

Decorated egg before and after adding water. The water makes the marker dye spread and blend, while crayon decorations don't change!

Finished Easter eggs on display

Science at Home: "Eggless" dyed Easter eggs

NOTE

You can use a straw to drip water with these steps: 1. Stick the straw in the water, 2. Cover the top of the straw completely with you finger, which will trap the water inside, 3. Move the straw, keeping the top covered with your finger, 4. When you are ready to release the water, remove your finger.

If you don't have a pipette or straw, use a paintbrush or your finger to paint water over eggs.

THE SCIENCE

Some chemicals mix easily with water, while others do not!. The type of dye used in making markers is an example of a chemical that mixes really well with water. When you add water to your decorated egg, the dye starts mixing with the water immediately: you see it spreading out wherever there is water! The coffee filter also helps the dye and water spread around because it is made of a special kind of paper that interacts well with water.

Crayons are made of a different kind of material that does NOT mix well with water. Crayons are made of wax and a different kind of dye than markers. Crayon wax and dye do not mix with water, so your crayon designs look exactly the same on your eggs before and after adding water!

TRY THIS!

You can find other kinds of dye that mix with water! Drop a Skittles candy or a drop of ordinary food coloring (not gel food coloring) into a cup of water. Watch the colorful dye start swirling into the water as it mixes together! Pour a little bit of vegetable oil on top. Oil is another example of something that does NOT mix with water. Even after the colorful dye is totally mixed into the water, the oil will still sit on top and never mix in!